

PATENT  
Docket No. NB 2016.00

#10A  
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|---|--|
| Certificate of Mailing/Transmission (37 C.F.R. § 1.8(a)):   |  |
| [X] Pursuant to 37 C.F.R. § 1.8, I hereby certify that this paper and all enclosures are being deposited with the United States Postal Service as first class mail on the date indicated below in an envelope addressed to the Commissioner for Patents, Washington D.C. 20231. |  |
| Dated: <u>9/26/02</u>   | Name of Person Certifying: <u>Jocelyn L. Lee</u><br>Printed Name: Jocelyn L. Lee |

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Ming Fai Chan, et al.

Serial No.: 09/847,525

Filed: May 1, 2001

For: BETA-LACTAM ANTIBIOTICS

Group Art Unit: 1624

Examiner: Berch, Mark L.

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OCT 07 2002

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**AMENDMENT AND RESPONSE TO OFFICE ACTION**

Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

This paper is submitted in response to the Office Action issued by the U.S. Patent and Trademark Office on March 26, 2002 in connection with the above-identified application. A response to the March 26, 2002 Office Action was due June 26, 2002. Enclosed herewith is a petition for a three month extension of time, making the response due September 26, 2002. Accordingly, this response is timely filed.

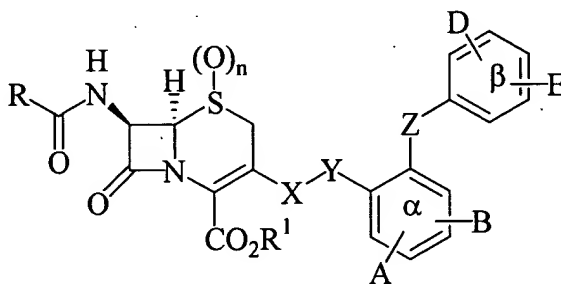
## I. AMENDMENTS

Please amend the subject application as follows:

In the specification:

Please replace the paragraph under ABSTRACT OF THE INVENTION on page 93 as follows:

This invention provides improved beta-lactam antibiotic compounds of the formula:



wherein R, R<sup>1</sup>, X, Y, Z, A, B, D and E are defined herein. The present invention also provides methods for inhibiting the growth of both antibiotic resistant and sensitive microbial infections. It provides a means of taking advantage of a key disease resistance mechanism to activate these drugs locally, and to overcome the resistance phenotype of the microbes. In addition, the invention provides methods for treating a subject infected with an antibiotic resistant microorganism by administering the compounds or compositions of the invention. The present invention also provides a novel synthetic method for the synthesis of the compounds.

In the claims:

Please amend claims 1, 41, 43, 44, 46, 49 and 52 to recite as follows: